Traffic Engineering

Official Publication of the Institute of Traffic Engineers

May We Offer . . .

Traffic Engineering is that phase of engineering which deals with the planning and geometric design of streets, highways, and abutting lands, and with traffic operation thereon, as their use is related to the safe, convenient, and economic transportation of persons and goods.

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COVER: William Penn's statue atop Philadelphia's city hall extends a welcome to the Institute of Traffic Engineers meeting there in October.

Annual Meeting Program 548

Driver Education 551
J. H. Harvey

Parking Round-Up 553

ITE Activities 578

Personalities 586

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VOLUME XVIII **SEPTEMBER, 1948** **NUMBER 12**

Frankly Speaking

THE third independent and Nineteenth Annual Meeting of the Institute of Traffic Engineers is scheduled for October 11-13, in Philadelphia. The success of our last two conventions indicates that our meeting in October will reflect further evidence of the growing importance of the traffic engineering profession. Assuming these things, it might be well just to study the program and see what the current traffic problems are.

A hurried glance is all that is required to learn that the bulk of current traffic problems are urban in nature. Parking, one-way streets, loading and unloading in downtown streets, and timing plans for a network of signal systems are but a few of the municipal aspects of traffic scheduled for discussion.

One of the most significant items on the agenda, to us, is entitled "Means of Facilitating Liaison Between Police and the Traffic Engineer." We have attached significance to this because had this general subject come up ten years ago, it might have been entitled "Functions of the Traffic Engineer to the Police." Apparently it is now assumed that each has obtained clear terms of reference and we are now going through a period to learn how best both professions can assist each other.

Another interesting subject that deserves more than passing interest concerns organization and administration of engineering departments. Do you realize that most highway organizations, city, county and state, are based on organizational plans developed when construction was the principal concern of most engineers. How much influence traffic has on plans for reorganization should be determined.

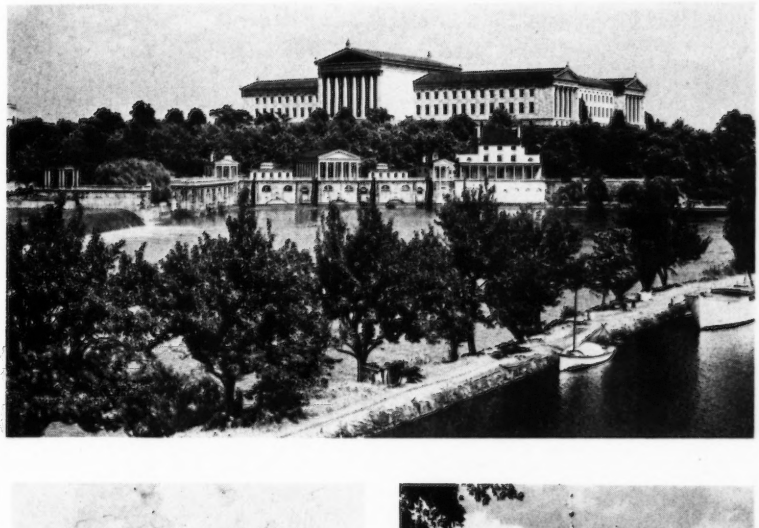
There are two subjects which appear at regular intervals and which indicate that they are always timely. These are public relations for the traffic engineer and state traffic engineering help for the smaller communities.

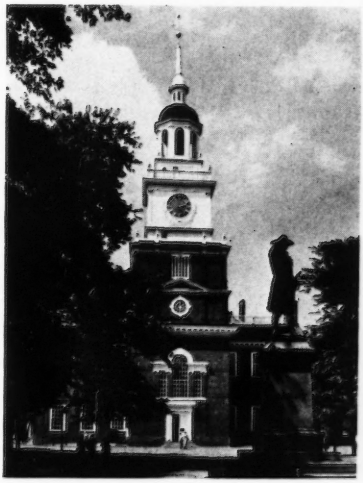
One lesson the Institute officials have apparently learned is that entertainment is more desirable than a guest speaker for the annual banquet.

Robert O. Swain

Editor

Traffic Engineers To See Philadelphia Landmarks





Top, the Art Museum, considered one of the finest in this country, contains many rare and notable collections. From the West River Drive the Museum offers a most impressive view.

The Fairmount Park Aquarium displays more than 4,000 specimens of sea life. Traffic Engineers attending the Institute's annual meeting will be able to visit this site.

Left, Warwick Hotel, ITE headquarters.

Right, in this beautiful Colonial building, the most historic spot in the United States, the Declaration of Independence was signed July 4, 1776. Here is housed the famous old Liberty Bell, as well as the table on which the Declaration was signed and an important historical collection of portraits and relics.

PROGRAM

Nineteenth Annual Meeting

INSTITUTE OF TRAFFIC ENGINEERS

October 11-13, 1948

HOTEL WARWICK, PHILADELPHIA, PENNSYLVANIA

SUNDAY, OCTOBER 10th

2:00 P.M.—Board of Direction Meeting
Business Meeting of Standing Committees (Upon call of chairmen)

MONDAY, OCTOBER 11, 1948

8:00 A.M.—REGISTRATION

9:00 A.M.—ANNUAL BUSINESS MEETING

12:00 Noon—ADJOURNMENT—Reconvene at 2:00 P.M.

2:00 P.M.—TECHNICAL SESSION NO. 1
WELCOME TO CONFERENCE—Mayor, City of Philadelphia.

2:15 P.M.—MAKING BETTER USE OF PRESENT FACILITIES—Victor G. Hofer, Traffic Engineer, Chicago Park District.

2:45 P.M.—MEANS OF FACILITATING LIAISON BETWEEN POLICE AND THE TRAFFIC ENGINEER—Inspector Arthur Miller, Wash., D. C., Metropolitan Police Dept.

3:15 P.M.—THE PUBLIC RELATIONS JOB OF THE TRAFFIC ENGINEER—John W. Darr, President, Institute of Public Relations, New York.

3:45 P.M.—ORGANIZATION AND ADMINISTRATION OF TRAFFIC ENGINEERING DEPARTMENTS—
Discussion Leader:
Sherman P. Voorhees, Exec. Director, Future Springfield (Mass) Inc.
Panel Members:
W. L. Haas—Public Roads Administration, Washington, D. C.
Henry A. Barnes—Traffic Engineer, Denver, Colorado.
M. Earl Campbell—Engr. of Traffic & Operations, Highway Research Board.
Earl J. Reeder—Dir., Dept. of Traffic & Transportation, Miami, Fla.

5:00 P.M.—ADJOURNMENT—Reconvene Tuesday at 9:45 A.M.

TUESDAY, OCTOBER 12, 1948

8:15 A.M.—BISCUIT BANTER BREAKFAST—Conducted under the auspices of the Resolutions Committee—Hawley S. Simpson, Chairman.

9:45 A.M.—TECHNICAL SESSION NO. 2
PARKING GARAGE DESIGN FACTORS—Edmund R. Ricker, Traffic Engineer, New Haven. Conn.

10:15 A.M.—WAYS AND MEANS OF REDUCING TRUCK LOADING AND UNLOADING CONGESTION ON DOWNTOWN STREETS—Dwight M. McCracken, Mgr., Motor Transport Bureau, Liberty Mutual Insurance Company, Boston, Mass.

10:45 A.M.—BENEFITS OF A ONE-WAY STREET SYSTEM—Eugene Maier, Dept. of Traffic & Transportation, Houston, Texas.

11:15 A.M.—PARKING METERS—WARRANTS FOR, VALUES AND USE—
Discussion Leader:
Henry W. Osborne—Traffic Engineer, Buffalo, N. Y.

Panel Members:
Paul S. Robinette, Traffic Engineer, City of Toledo.
Burton W. Marsh—Dir., Traff. Engr. & Safety Dept., AAA, Wash., D. C.
Matthew C. Sielski—Dir., Safety & Traff. Engr. Dept., Chicago Motor Club.

12:00 Noon—ADJOURNMENT—Reconvene at 2:00 P.M.

2:00 P.M.—FIELD TRIP FOR ALL REGISTRANTS

WEDNESDAY, OCTOBER 13, 1948

9:15 A.M.—TECHNICAL SESSION NO. 3
RELIGHTING A CITY—Thomas J. Seburn, Traffic Engineer, Kansas City, Mo.
SURVEYS AND DATA FOR IMPROVING TRANSIT OPERATIONS IN DOWNTOWN AREAS—Gordon Gravelle, Traffic Engineer, Capitol Transit Co., Wash., D. C.

10:15 A.M.—HEADLIGHTING WITHOUT GLARE—Val J. Roper, General Electric Co.

11:00 A.M.—DEVELOPMENT OF A TIMING PLAN FOR A NETWORK OF SIGNAL SYSTEMS—Charles J. Murphy, Traffic Engineer, Baltimore, Maryland.

11:30 A.M.—REFLECTORIZED PAVEMENT MARKINGS IN THE WESTERN STATES—E. L. Mathes, Traffic Engineer, Idaho Bureau of Highways.

12:00 Noon—ADJOURNMENT—Reconvene at 2:00 P.M.

2:00 P.M.—TECHNICAL SESSION NO. 4
HIGHWAY NEEDS OF EXPANDING URBAN AREAS—H. S. Fairbank, Deputy Commissioner in Charge of Research, Public Roads Administration.

2:30 P.M.—ENGINEERING REGISTRATION FOR THE TRAFFIC ENGINEER—Col. George H. Barrows, Executive Secretary, New York State Society of Professional Engineers.

3:15 P.M.—INFLUENCES OF TRAFFIC ON DECENTRALIZATION OF CITIES—Henry S. Churchill, City Planning Consultant, New York City.

3:45 P.M.—THE PRESIDENT'S HIGHWAY SAFETY CONFERENCE IN RELATION TO THE CITY TRAFFIC ENGINEER—A. A. Potter, Vice Chairman, Committee on Engineering, and Dean, Schools of Engineering, Purdue University.

4:15 P.M.—STATE TRAFFIC ENGINEERING HELP FOR COMMUNITIES—
Discussion Leader:
Arnold H. Vey, State Traffic Engineer, New Jersey.
Panel Members:
C. A. Harrell, City Manager, Norfolk, Virginia.
Robert A. Burch, Traffic Engineer, North Carolina State Hwy. Dept.
J. C. Young, Traffic Engineer, Calif. Dept. of Highways.
Harold G. Van Riper, Planning & Traffic Engineer, Pennsylvania Dept. of Highways.

5:00 P.M.—ADJOURNMENT

6:00 P.M.—RECEPTION

7:30 P.M.—ANNUAL DINNER
PRESENTATION OF PAST PRESIDENT'S CERTIFICATE
ENTERTAINMENT

Public Attitude on Transit Studied

The Philadelphia Transportation Company recently changed the type of equipment in use on the Morris Tasker line in South Philadelphia. Regular streetcars which had previously run on this line were replaced by modern trackless trolleys. The transit company asked National Analysts to determine public reaction to this change. To this end, a survey was conducted among two different groups of people:

1. Actual riders of the line—those people who were either boarding or leaving one of the vehicles.
2. Householders who live along the line—those people who are either actual or potential riders.

A summary of findings follows:

90.3% of both groups of people have a favorable or improved attitude toward the new equipment on this line. (All of the riders have by definition used this line and 95.8% of the householders have ridden on the new equipment. Over 98% of all those questioned had had experience with the old equipment.)

98.3% of all those questioned preferred the new equipment in contrast to the .8% who stated they preferred the old equipment.

73.2% of all those questioned considered the service better since the installation of the new equipment, while only 2.4% considered it poorer. The householders had a somewhat stronger feeling that the service was better (78.5%) than did the riders (70.2%).

66.6% felt that the courtesy of the operators was about the same as previously. The balance, however, is in the direction of more courtesy (27.1%) rather than less (1.4%). As might be expected, the riders are slightly more aware of the additional courtesy (28.6%) than are the householders (24.0%).

68.0%, or over two-thirds of those questioned, believe that PTC is putting new equipment into use as fast as it can; 13.1% say that it is not as fast as it might be; and 17.2% state that PTC is replacing equipment only when the old is entirely worn out. A noticeable contrast exists when householder and rider replies are separately considered:

	Householder	Rider
As fast as it can	77.0%	63.0%
Not as fast as it might	8.0	15.9
Only when old is entirely worn out	10.4	21.1

71.5% of all those questioned prefer trackless trolleys to either streamlined streetcars or modern buses. 78.7% of the householders took this position as compared to 67.5% of the riders.

Driver Education

by JULIEN H. HARVEY

THE fact that the secondary schools offering some form of course in driver education almost doubled in number during the past year is a gratifying revelation to those concerned with safety on the nation's streets and highways. It has long been accepted as an irrefutable truth that teaching safe driving to youths just reaching driving age is one of the major ingredients of a successful accident prevention program. Hence, this widespread acceptance of driver education as a necessary part of the school curriculum is a long stride toward the eventual total reduction of preventable losses in life, limb and property.

Complete figures on the number of driver education courses in the nation and the number of students enrolled are not yet available. But the tabulation of the records of 38 states, made for the annual Driver Education Award Program of the Accident Prevention Department, Association of Casualty and Surety Companies, gives a fair picture of what progress has been made this year.

Complete Data

In 25 states, where complete information was submitted for the program, 3,055 secondary schools are teaching driver education where only 1,751 had such courses the year before. Even better progress was effected in the number of students enrolled. During the school year just completed in those 25 states, 223,230 students were enrolled in driving courses, compared with 83,661 the year before.

Thirteen other states submitted partial information for the award program, but because of incomplete records for the previous year no comparison could be made of their progress. Here's how the record stands this year, however, for the 38 states participating in the program:

Number of schools	19,006
Number of courses	3,918
Eligible students	1,643,836
Students enrolled in driver courses	238,030

From these figures it can readily be seen that much still remains to be done if we are to ensure instruction in safe driving and safety consciousness for ALL of our high school youth. With this need for progress in mind, the Association of Casualty and Surety Companies a little more than a year ago devised a plan for recognizing the strides made by states in teaching driver education. It was felt that public recognition of a job being well done would enhance the program in the state where the recognition was given and spur other states to match its progress.

Board Named

Accordingly, the Driver Education Award Program was announced. Last June, a board of 11 judges met in Chicago and reviewed the results for the first year. As a result, nine states were deemed eligible for honors under the rules of the program, and, because of unusual progress made in two states, the system of awards was expanded. As originally conceived, the Association was to give three types of awards.

A Superior Award, presented to each state which maintained driver education courses in 50 per cent of its high schools and enrolled at least

one half of its eligible students in them, was won this year by North Dakota and Wisconsin. A Meritorious Award, requiring courses in 25 per cent of the schools and a 25 per cent enrollment, was won by Illinois, Massachusetts, New Jersey, Virginia and West Virginia. A top award for "Excellence of Achievement", to be given at the discretion of the judges to the state or states which attained outstanding standards in an over-all driver education program, was not presented this year. The judges held that, while a great deal of progress had been made, no one state had reached the standards they had set for the top award.

A fourth award was deemed necessary, however, when the judges reviewed the records of Arizona and Delaware. Both states fell just short of the requirements for a Superior Award, but so far exceeded those necessary for a Meritorious honor that a Special Award was arranged for them. For example, Delaware's State legislature appropriated $50,000 for a thorough driver education program in all secondary schools. Itinerant teachers were hired to go from school to school, giving classroom instruction and excellent behind-the-wheel practice. But, while Delaware had driver education courses in all but two of its schools, only about 11 per cent of the eligible students were enrolled. Hence the Special Award. In Arizona 97 per cent of its schools had courses, but the enrollment totaled only 48 per cent of the eligible students in the state. The judges deemed this situation worthy of recognition with a Special Award.

Top Records

Naturally, those two states receiving the Superior Award have the most laudable records. Wisconsin, which has 463 public, parochial and private secondary schools, had safe driving instruction in 298 of them. Of 34,258 students eligible for the courses, 18,959 were enrolled.

North Dakota, the other Superior Award winner, stands out as a model for all. Its record is as simple as it is revealing: 369 schools, 369 courses: 7,576 eligible students, 7,576 enrolled. Where other states can boast that they increased the number of courses and the enrollment over last year, North Dakota can reply that they had no increase—because there was no room for it. The state had already reached its maximum number of courses and enrollment long before the award program was announced by making a course in safe driving compulsory for a diploma. It is worthy of the praise of safety officials, educators and the American public as a whole for its leadership in this field of accident prevention.

In a series of special ceremonies next September, representatives of the Association of Casualty and Surety Companies will present the first awards to the nine states mentioned here. Meanwhile the award program will be continuing. Persons especially designated by the governors of the participating states will already be compiling the information which will be necessary for the judging of the second awards next spring.

It is hoped that all 48 states will participate in the program and that more and more states will attain the high standards necessary for the awards in 1949 and the succeeding years. It will be a great victory in our continuing war against preventable accidents when all states in the Union, like North Dakota, have driver education courses in all of their schools and enroll all of the eligible students therein.

Off-Street Parking News Round-Up

Editor's Note: This is the second news round-up on what cities throughout the country are doing to solve their parking problems. Readers are invited to supply new information where it is missing, or to correct any errors.

Allentown, Pennsylvania (Pop. 97,000)

Under the guidance of a local newspaper man, the merchants of Allentown have formed a corporation known as PARK & SHOP, INC., the sole purpose of which is to solve the customer parking problem in the city.

Park & Shop, Inc. now owns seven tracts of land with a parking capacity of 460 cars and a potential capacity of 800 cars when properly developed. In addition, three other lots are under license for use by customers of Park & Shop stockholders with a capacity of 160 cars. Thus the potential capacity of land now under control of the corporation is nearly 1,000 cars. Park & Shop plans call for 1,200 car spaces, so the group is gradually approaching its goal.

$200,000 worth of common stock has been subscribed by forty merchants.

All of the lots owned by the corporation are leased to independent operators, which means there is income other than from customers of Park & Shop stockholders. A little over a month ago the corporation was validating from 800 to 1200 parking tickets per month. It is realized that this is a small number, but the operation has just been instituted and is not yet well known among shoppers.

Baltimore, Maryland (Pop. 859,000)

The Parking Authority which was authorized by the 1947 Session of Maryland Legislature has been appointed by the Mayor of Baltimore and has been holding regular meetings and hearings.

The shuttle bus service in connection with a perimeter parking lot is still being used to capacity and it is hoped that this type of service can be expanded before the end of the year.

The Lexington Market project which will provide over 800 roof parking spaces is in the hands of the architects who are preparing contract drawings which should be ready for bids in a few months.

There are several other parking projects by private owners showing some activity. One important lot will start in a few weeks on the erection of two decks which will more than double its capacity.

Bluefield, West Virginia (Pop. 21,000)

A deck type municipal garage is being built at a contract cost of $397,000. The city bought the lot at a strategic location for $114,000. The city looks upon the project as self-liquidating and the bonds issued are to be retired from garage income. Parking income will be augmented from use of the ground floor by one of the large oil companies which has contracted for its use as a service station.

About a third of the building was being used for parking a month ago. It was expected that the garage would be under full operation about this date.

Boston, Massachusetts (Pop. 771,000)

The off-street parking facilities are progressing slowly. The legislature authorized the City of Boston to spend $5,000,000 for the establishment of off-street parking facilities. The first step was to have the Real Estate Commission select appropriate sites. A half dozen sites were selected. Most of them include an existing parking lot and some of the buildings adjoining. In almost every case, the work of razing the abutting buildings has been completed. The larger parking lots

thus created have been advertised for temporary lease pending a completion of plans to construct deck garages on the sites. Several of these have been leased for periods of six months. The city is now endeavoring to get private contractors to erect and operate deck garages on these sites on a forty-year basis after which the buildings will be turned over to the city.

The garage under Boston Common is still in the courts. It is reported that there is some sentiment diametrically opposed to its construction but most people feel that they are willing to have it providing they can be assured that the trees and other vegetation will not be changed or ruined by constructing a garage. There has been much testimony pro and con. Some experts say that the trees will be ruined. Some say that they will not. The outcome of these controversies is much too obscure at this time to venture a prediction.

Brookline, Massachusetts (Pop. 50,000)

At the Annual Town Meeting held in March, it was voted not to appropriate any money for the purchase of land for off-street parking purposes as was proposed. $50,000 was appropriated, however, to purchase and install parking meters.

Burlington, Iowa (Pop. 26,000)

Property has been acquired and developed along the river front for use for off-street parking. Expansion of the facilities available is expected during the summer and fall.

Cambridge, Mass. (Pop. 111,000)

Two municipal parking lots are operated by the city.

Charlotte, N. C. (Pop. 101,000)

The field work of a complete parking survey, sponsored jointly by the city, state and federal government, was completed some months ago, and the final report and recommendations should be ready shortly.

Detroit, Mich. (Pop. 1,623,000)

The Parking Authority, authorized last year, has been established and the following recommendations made:

1. To try out parking meters in four different sections of the city.

2. The approval of the Washington Boulevard underground garage. (This is reported approved and the revenue bonds ordered sold). Construction will start possibly within six months if there are no difficulties in connection with foundations under the Statler Hotel and the David Whitney Building. The garage will have a capacity of some 950 cars. Expected fees will be 25 cents for the first hour and 15 cents for each additional hour.

3. The provision of two additional parking projects, one on the east side in the vicinity of Brush and Madison, and one in the southwest section of the downtown area.

The authority is composed of representative business men with members of the City Plan Commission and the Traffic Engineering Bureau serving as advisors.

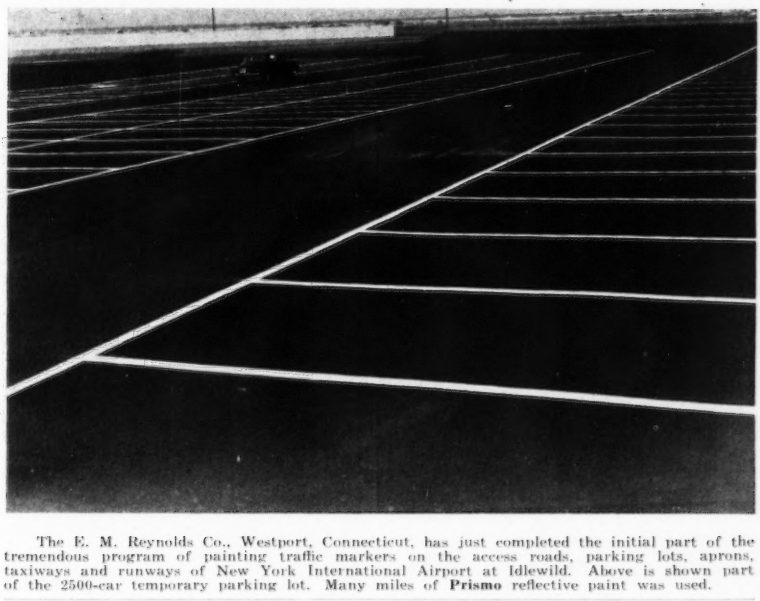
Eugene, Oregon (Pop. 21,000)

A traffic and parking survey showed a need for additional off-street parking space for 1,400 to 1,800 cars, and that 10 years hence parking space will be needed for 2,300 to 2,700 cars. The 10-year estimate was based on the assumption that population will increase 20 per cent and that car ownership will increase from the present one car to three persons, to one car for two persons. As the result of this survey the Chamber of Commerce and Realty Board adopted resolutions urging the council to consider acquisitions of off-street space immediately for 1,600 cars, and that the city require new or expanded business buildings to provide their own parking space.

Fort Wayne, Indiana (Pop. 118,000)

Plans concerning the establishment

Reflective Paint Outlines Parking Lot



The E. M. Reynolds Co., Westport, Connecticut, has just completed the initial part of the tremendous program of painting traffic markers on the access roads, parking lots, aprons, taxiways and runways of New York International Airport at Idlewild. Above is shown part of the 2500-car temporary parking lot. Many miles of **Prismo** reflective paint was used.

of a parking authority to handle the city's parking problem have still not materialized under the new city administration.

Franklin Square, L. I., N. Y. (Pop. 6,000)

It is reported that in this small community a $32,000 parking lot behind stores in the business district is being financed by benefit assessment, payable over a period of 10 years.

Garden City, L. I., N. Y. (Pop. 11,000)

The village of Garden City condemned 8½ acres of land for off-street parking purposes. Land is located mostly behind business establishments. Assessments paid in 10 annual installments have paid for the cost of the land. The assessed value of the land is $93,000 and the cost of development was $143,000. (Actual cost of the land may have differed from assessed value. If so, actual value is not known.)

Upkeep and maintenance of the parking lots is handled by the city and all parking is free.

Grand Rapids, Michigan (Pop. 164,000)

About nine months ago the City Planning Commission recommended to the City Commission the formation of an Automobile Parking Authority which is authorized under a Michigan Enabling Act.

The City Commission created such an Authority, and seven leading business men agreed to accept appointments as members.

The studies they have made resulted in a tentative off-street parking plan which has been submitted to the general public with gratifying acceptance.

The plan consists of the acquisition by the city of some nineteen pieces of vacant property in the central business district and other properties located in

the outlying community centers. It includes a proposal to build three-level open parking units on six of the locations in the central business district. In every case the plan contemplated self-parking controlled by parking meters.

The total cost of the entire plan approximates $2,500,000 to be financed as far as possible with revenue bonds, the balance through special assessment bonds.

Great Neck Plaza, N. Y. (Pop. 6,000)

Two municipal plans have been submitted to the city for consideration, one by the traffic engineering division of the National Conservation Bureau and the other by the local Chamber of Commerce. The latest report doesn't reveal which plan was adopted but that it is expected that parking facilities with a capacity of 250 cars will be ready within the next few months.

Greenwich, Connecticut (Pop. 36,000)

The city now operates four small, free parking lots. Plans call for the provision of 900 more off-street parking spaces on three interior-block areas.

State enabling legislation gives the town authority to assess benefits and to condemn property for parking purposes, but any action must be contingent upon approval by the electors and upon adoption of an ordinance setting forth the portion of the total cost to be so assessed.

The four lots now in operation were not provided under the state enabling act.

Jackson, Mississippi (Pop. 21,000)

A sum of $400,000 was obtained through the issue of bonds for the purpose of providing off-street parking facilities, both for land acquisition and construction of garages. Surveys were made and condemnation proceedings instituted for one site.

The City of Burlington, Iowa, has revised the city ordinance pertaining to the office and duties of the city traffic Engineer.

The revised ordinance places the Traffic Engineer in the Department of Public Safety, for purposes of closer liaison between engineering and enforcement. However, complete access to all engineering improvement plans, and specifications are directed through the Traffic Engineer before final acceptance.

The latest report is that the entire program is now stalled during lengthy litigation over the acquisition of this first site.

Kalamazoo, Michigan (Pop. 54,000)

In the fall of 1939, the city opened a municipal parking lot with a capacity of 390 cars known as "Shoppers' Parking Lot." The above-mentioned property was purchased in the spring of that year, the buildings were removed, the lot surface treated and driveways placed at a cost of a little over $60,000. This amount was assessed against the property where it was thought the greatest benefits would be derived.

With the aid of a committee of some 20-25 interested citizens, the assessor decided that there should be three zones known as A-B-C. Zone "A" was assessed 40%, Zone "B" 40%, and Zone "C" was assessed 20% of the total cost. These assessments were based 50% according to area and 50% according to assessed valuation. No consideration was given to land usage because of the fact that land usage might change within one year or less or might continue on a long period of time.

This parking lot was developed primarily for the business in a fast disintegrating area principally on account of the lack of parking accommodations. The underlying thought of the owners, as well as the city officials was to stop this disintegration and increase the valuation and at the same time retard decentralization.

An advisory board to the city manager made up of five property owners within the assessment district decided that a two-hour parking limit should be established as free, the next hour to be 10 cents and each additional hour or part thereof, 5 cents. Three attendants are on duty during the hours 8:30 A.M. and 6:00 P.M., the hours between 6:00 P.M. and 8:30 A.M. free.

Past experience indicates that the income slightly exceeds the cost of attendants, light, water and other maintenance. However, last year the lot showed a small profit of approximately $800.00 for the year.

In only one case a property owner started

suit, trying to stop the city from collecting the assessment against his property. This was taken to circuit court and decided against the property owner. Only the city's power to make the assessment was challenged, not the amount of the assessment.

Kansas City, Kansas (Pop. 121,000)

Through a state enabling act Kansas City is providing 2,000 off-street parking spaces within its busines district. The unusual feature of the plan is that it is financed 20% through local taxation or general funds and 80% through benefit assessment against properties in a so-called benefit district, comprising approximately 11 square blocks. Total cost is reported to be around $400,000 and assessments are payable over a period of 10 years. It is further reported that bonds were sold for about one per cent interest rate.

Madison, Wisconsin (Pop. 67,000)

A Parking Commission has been appointed in Madison consisting of the City Manager, City Engineer and Captain of Traffic. During 1947 the legislature authorized municipalities to acquire property and operate parking facilities, and to issue mortgage bonds to acquire funds for financing such operations. Bonds are to be payable only from revenue derived from properties owned.

Under authority of this legislation an ordinance was enacted establishing a Parking System Utility and authorizing the issuance of $400,000 in bonds "secured by parking meters and other properties of the utility." Three lots, with a capacity of 530 cars, are already in operation, and funds are on hand for a fourth.

The ordinance provides that 25% of the Utility's gross income shall be set aside for operation and maintenance, 12% for depreciation, and the remaining 63% for the payment of principal and interest on the bonds. It is reported that this division of the revenue is proving satisfactory.

Since parking meters are also owned and operated by the Utility under this plan, meter funds can be used to help finance off-street facilities.

Miami, Florida (Pop. 172,000)

A far reaching plan that would relocate Bayfront Park in an effort to solve the city's parking problems, is under consideration. The estimated cost is $3,800,000 and space would be provided for 5,000 cars. The park would literally be moved into Biscayne Bay onto land to be reclaimed from that part of the bay now fronting on the park.

Patrons would park their own cars and fees would be collected by meters. Financing would be by 20-to-30 year revenue bonds. Annual collections are estimated at over $500,000.

Shuttle buses, charging probably five cents, would operate between the parking area and downtown Miami, although no part of the area would be more than a half mile from the center of the city, and most of it only five blocks away.

Miami Beach, Florida (Pop. 28,000)

The City of Miami Beach, Florida, at the present time has four municipal off-street parking areas in operation with a capacity of five hundred cars.

Two additional tracts of land have recently been acquired near a neighborhood shopping center. These lots are to be developed this year and will have a capacity for approximately one hundred cars. It is planned to greatly enlarge the capacity in the future.

To get the program started $50,000 was originally appropriated, and in 1946 $300,000 in revenue bonds was issued.

All of these parking lots are self liquidating by means of parking meters which permit one and one-half hours parking for five cents. In addition to this revenue, the revenue from approximately 1900 parking meters along the streets in congested areas is also put into the fund for the development of off-street parking areas.

These parking areas are beautified by means of extensive landscaping and on one large lot money change machines are provided for the convenience of the public.

Minneapolis, Minnesota (Pop. 492,000)

An off-street parking Technical Committee has made definite plans for submission to the city council. Original plans call for the construction of a "pilot garage" the cost of which can, it is reported, be assessed up to 50% against benefited properties under recent enabling legislation including the Elwell law.

Monroe, Michigan (Pop. 18,000)

Condemnation proceedings were started in February 1948 to obtain space for a 260-space parking lot from two property owners who had refused to sell to the city. The case is not settled.

Merchants agreed to raise $40,000 voluntarily among themselves of a total estimated cost of $80,000 for the provision of some 600 off-street parking spaces in the business district.

Present plans are that the parking will be free of charge.

(See Parking, Page 582)

A giant, double-jointed electric trackless trolley, able to weave snakelike through the densest traffic, is soon to be tested in Chicago. The transit leviathan, formerly powered by gasoline is being converted to electric operation for economy and to provide complete quiet and lack of fumes.

According to the Chicago Transit Authority, this is the largest vehicle of its kind. The experimental trackless trolley is 47 feet long and seats 58 persons, as many as a modern streetcar. It is hinged in the middle so it can make a sharper turn than many shorter vehicles now in use.

Parking Meters In Police Station

The following story of what Edenton, N. C., is doing to improve its parking facilities and operation of its parking meters will be interesting to Greenville city officials and others:

If the public cooperates there will be no $1 fine for overparking in meter zones in Edenton.

The Police Department and Mayor Leroy Haskett have revealed that the parking fines have been suspended temporarily as they try out a new honor method on the meter violators.

According to the new setup now in effect violators will still be cited by the Police Department and offenders will report to the police station on King Street and deposit a sum in a meter which has been installed in the police station.

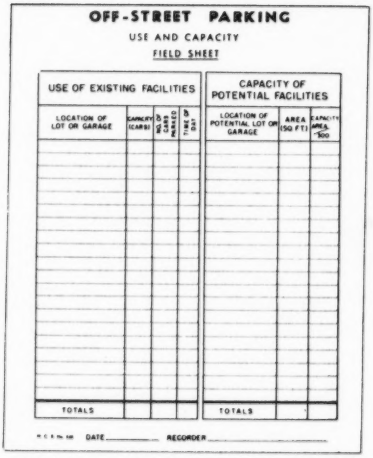
Here's how it works:

A motorist parks his car in a meter space and deposits a nickel for one hour. Due to business reasons he fails to return to the meter in time to keep from being a violator. On his return he finds a citation ticket on which is the time of day he is checked as a violator and cited by the police. For example it is 10:15 o'clock in the morning. He waits until 11 o'clock to go to the police station and his fine is one nickel because he overparked and didn't report to the station until an hour had elapsed. If he goes immediately to the station, say at 10:20 o'clock, his fine would still be five cents which must be deposited in the special station meter because the fine is five cents for every hour or part of an hour until he reports to the station. Thus, if he didn't report for four hours his fine would be 20 cents.

The move has been made by the town and police department in an effort to please the public, merchants, buyers, shoppers and such. The system will remain in effect unless the public fails to honor it.

Mayor Haskett voiced the sentiment that the town and police department were trying their best to please the public and that the new system is now in effect. It is not the intention of any town or police official to hurt anyone over the meters, he said.

Reference Notes



OFF-STREET PARKING

USE AND CAPACITY

FIELD SHEET

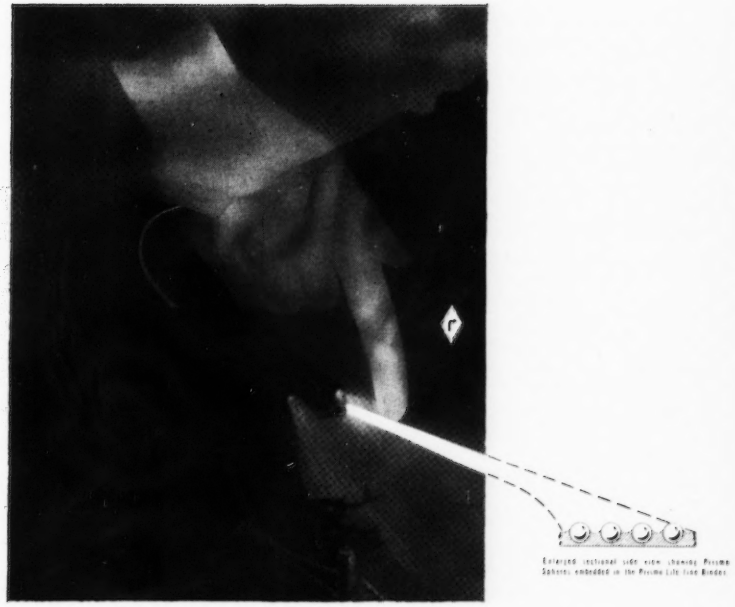
USE OF EXISTING FACILITIES				CAPACITY OF POTENTIAL FACILITIES		
LOCATION OF LOT OR GARAGE	CAPACITY (CARS)	NO. CARS PARKED 12 NOON	NO. CARS PARKED 5 P.M.	LOCATION OF POTENTIAL LOT OR GARAGE	AREA (SQ. FT.)	CAPACITY AREA ÷300
TOTALS				TOTALS		

DATE_____ RECORDER_____

Off-street parking field sheet for recording use and capacity of parking garages and lots issued by National Conservation Bureau.

Safety Drive Via Mail

Postmark plates bearing traffic safety slogans for use on metered mail now are available from the manufacturer in stock designs. Their use is the result of a suggestion by A. O. Dietz, president, Commercial Investment Trust, and a member of the Automotive Safety Foundation's operating committee.



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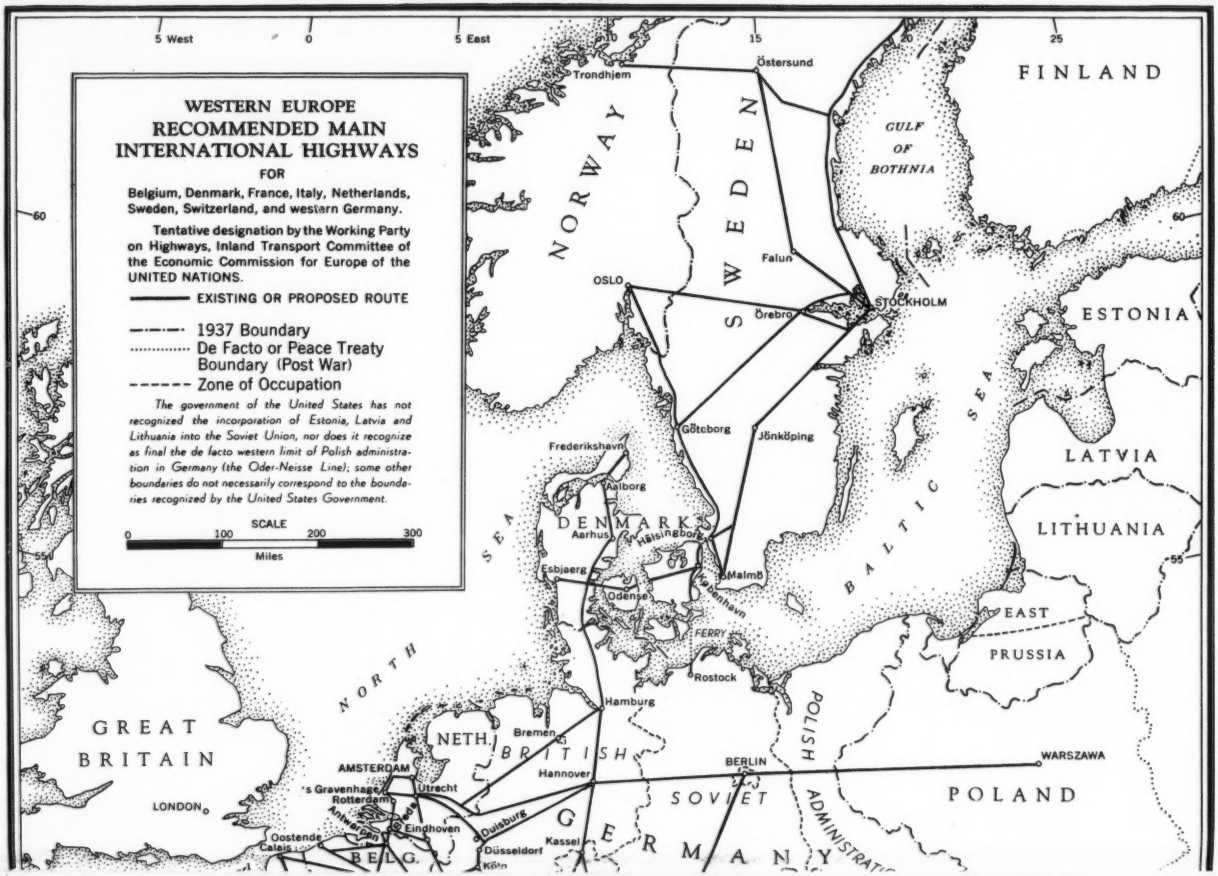
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The government of the United States has not recognized the incorporation of Estonia, Latvia and Lithuania into the Soviet Union, nor does it recognize as final the de facto western limit of Polish administration in Germany (the Oder-Neisse Line); some other boundaries do not necessarily correspond to the boundaries recognized by the United States Government.
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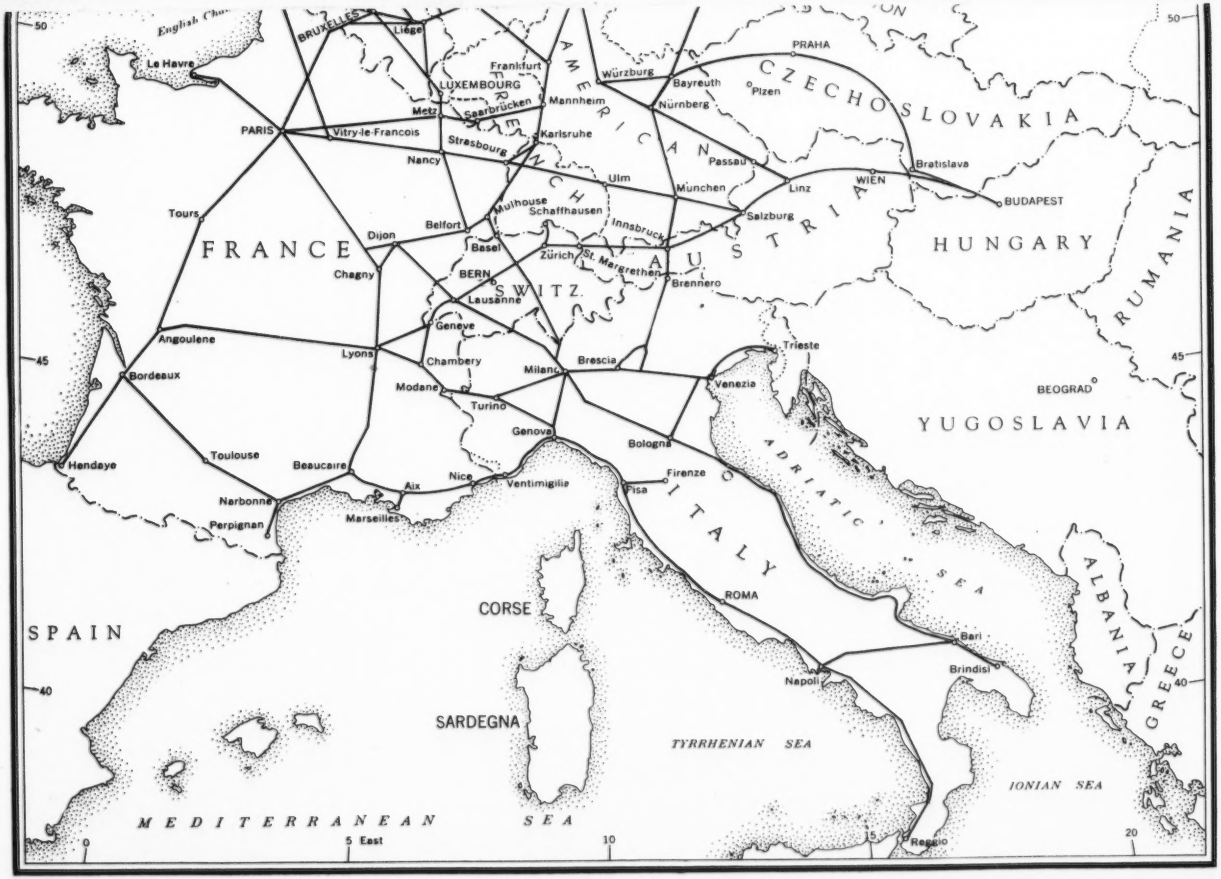
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Praise Facts Used By Traffic Engineer

The Charlotte News (N. C.) in an editorial recently says the following about its traffic engineer:

At long last Charlotte has a scientific approach to its vexing traffic problem. In the past, we've been much afflicted with armchair experts, who for certain, they thought, had the plan that would solve everything, and make it possible for all to go where they wanted when they wanted. Appeals to municipal administrators and letters to the editor held out a traffic Utopia if somebody would only show a little sense and adopt their plan.

Fortunately, in the recent past we have been spared dissertations on these "sure fire" plans as the traffic expert (?) has apparently taken cover and hidden behind his charts. Perhaps it is a case of darkness fleeing before the sun, ignorance shying away from enlightenment. We are constrained to believe that the garden variety of traffic expert doesn't dare pit his theories against the scientific analysis of our just-now acclimated traffic engineer.

In the few months that Traffic Engineer Hoose has been here and had opportunity to cast a discerning eye in the direction of Trade and Tryon Streets we have been impressed with the thoroughness and scientific "know how" he has brought to the study of the city's traffic perplexities.

Latest example of the Hoose approach is the report which he presented the other day on recommendations for extension of the downtown one-way street system. The engineer proposed that four streets be designated for east-west one-way traffic movement.

Those streets and the directional flow were designated after extensive traffic counts and studies had been made. For instance, Mr. Hoose's report, giving the number of vehicles in a twelve-hour period, revealed that 56 per cent of the traffic is desirous of westbound travel on Fourth Street between College and Church Streets and 53 per cent of the traffic on Fifth Street between Church and College Streets is desirous of eastbound travel. This information was the basis for determining the direction of the one-way traffic.

This study is typical of the traffic engineer's work in each change he has recommended. Every move he has made, even to switching the timing on traffic signals, was backed up by facts showing the demands of the greatest number of motorists. The problem of Charlotte's traffic is in the hands of an eminently qualified expert —an expert in fact as well as name.

More New Highways for Europe

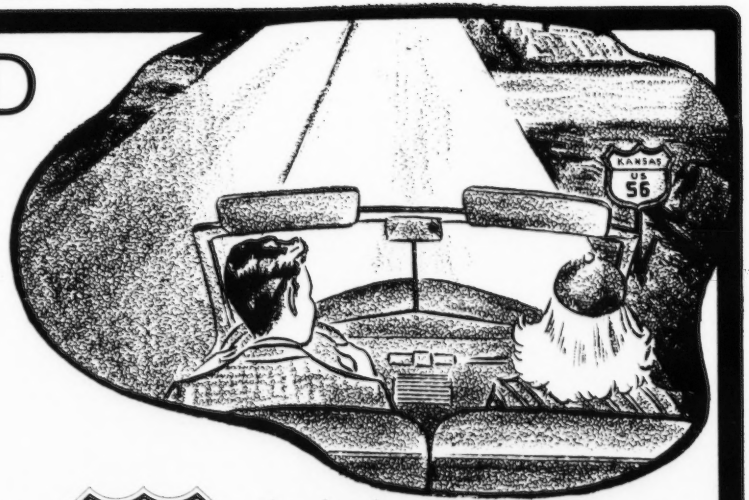
Plans for a European highway system capable of handling fast, heavy traffic on a continent-wide basis have been extended to cover Poland, Czechoslovakia and Britain.

A road transport working party of the United Nations Economic Commission for Europe, which outlined last spring the first tentative map of the new European highway network, has just completed a new series of meetings, the results of which have been to advance one stage farther the realization of the plan.

United States experts are convinced that low-cost highway transport throughout Europe would tremendously increase Europe's capacity to become self-supporting.

Economic Commission experts have agreed on three standard categories of roads. The first would be seven-meter-wide strips (about twenty-two feet); the second would be divided-lane highways, each strip seven meters wide, and the third would be exceptional roads, ten and a half meters wide. (See pages 560-561)

A FRIEND IN NEED



Night or day, the motorist needs to know where he is . . . and it's a wise government that keeps him posted *with well-marked hiways.*

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Cite Engineers for Safety

Continued exchange of traffic engineering ideas between cities is helping curtail the number of motor vehicle accidents throughout the nation, according to J. A. Carrothers, traffic engineer for the Association of Casualty and Surety Companies, New York City. In some instances the expenditure of small sums for improving dangerous locations has eliminated traffic collisions entirely, he said.

Mr. Carrothers' reference to improved accident rates was made in a review of engineering improvements distributed to city officials through a regular bulletin issued by the Accident Prevention Department. Entitled "Getting Results Through Traffic Engineering," the bulletin serves as a trading post of ideas for solving traffic headaches and is sent to over 2,400 officials throughout the country. Actual examples of reduction of street and highway traffic accidents and congestion are submitted by city engineers and traffic officials.

Proof Provided

Proof of the effectiveness of traffic engineering remedies is shown in a recent study of 54 outstanding examples distributed in the bulletin, Mr. Carrothers said. Traffic deaths at the location where traffic engineering improvements had been made were reduced 95 per cent, non-fatal but injuring accidents were reduced 88 per cent, and property damage accidents were halved.

Pointing out that the cooperation of city engineers and traffic officials had made the exchange of ideas through the bulletin successful, Mr. Carrothers gave particular praise to three city traffic engineers. They are Ernest H. Miller of South Bend, Ind., Henry W. Osborne of Buffalo, N. Y., and J. W. A. Bollong of Seattle, Wash. Each has contributed three of the 89 examples already published.

In one case reported by Mr. Miller 43 accidents occurred in 23 months at one South Bend intersection. Following standardization of signal lights, accidents for the next 23 months were reduced to 24. A pedestrian safety program conducted in the city from 1940 to 1945 cut pedestrian deaths 33 per cent. In the current engineering bulletin Mr. Miller reports that relocation of bus loading zones at one South Bend intersection reduced congestion enough to allow 11 per cent more traffic to flow. Accidents at the intersection dropped 25 per cent at the same time.

Results Shown

During the war, Mr. Osborne reported a study of accident prevention and fuel conservation benefits effected by a "car sharing" plan. In another incident, where 13 vehicles had struck the center piers of a railroad overpass during a two-year period, the piers were painted with diagonal stripes and blinking amber lights installed on them. During the two years following the improvement, only one accident occurred. In Mr. Osborne's most recent example, he reported 40 accidents in one year at a troublesome area in downtown Buffalo. Following installation of a one-way traffic system, an 80 per cent reduction in accidents resulted.

Mr. Bollong described a situation in Seattle where heavy flow of traffic at one busy intersection had resulted in 43 accidents in six months. By installing automatic electric signals whose timing could be regulated as traffic volume altered in peak hours,

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The Traficounter is used by scores of county highway departments throughout the country. Here is a typical comment, from the office of a county highway engineer regarding the excellent use being made of these precision built instruments.

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"Traffic counts taken before gasoline rationing are proving valuable in determining what roads should be included in this program from a traffic standpoint."

This "lightning fast" automatic counter of motor traffic consists essentially of an electric counter and recorder which registers the count of cars that pass the detector. **Streeter-Amet Company, 1726 Belle Plaine Avenue, Chicago 13, Illinois.**

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the city cut the number of accidents to 19 in the following six months. In another example, unusually congested conditions in a war plant area caused traffic delays of up to one hour. Street widening, new roadways and dispersed parking lots reduced the delay to 15 minutes despite increasing traffic volumes. Mr. Bollong's latest example reports a 90 per cent reduction in accidents at one three-way intersection. Channelizing islands and traffic-actuated signal control accomplished the improvement.

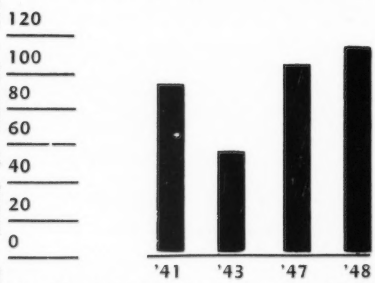
"City and state officials everywhere are beset with problems of traffic—especially accidents, parking and pedestrians," Mr. Carrothers said. "Since traffic is expected to double on our streets and highways in the next few years, city officials will do well to learn what their contemporaries are doing to solve these problems. They will learn that accident prevention can often be accomplished easily and cheaply."

Drivers' Safety Quiz

An accident prevention measure based on the knowledge of driving rules has been suggested to Governor Robert F. Bradford of Massachusetts by Harold F. Collins of Newtonville Center, Mass. He urged that with every application for driver renewal license there be enclosed a questionnaire containing a list of queries on driving procedure that must be answered before the permits are issued.

James J. Newman, vice-president, B. F. Goodrich Company, predicts that the tire output for 1949 will be at least 82,700,000 units.

Traffic Trends



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"Based on Public Roads Administration Data."

A device offered as an aid to those who smoke while they drive is a pipe holder attached to the sun visor of a car by elastic bands. When visor is angled for use the pipes are in position to drain properly.

New York Traffic Survey

A twelve-hour statewide traffic survey was made on August 14 by the New York Public Works Department. Employees stationed at 3,004 points, tabulated traffic as to type of vehicle and direction beginning at 7 A.M.

Latest available reports from the Maine Turnpike Authority (through May, 1948) indicate revenues of $185,980 since December 13, 1947.

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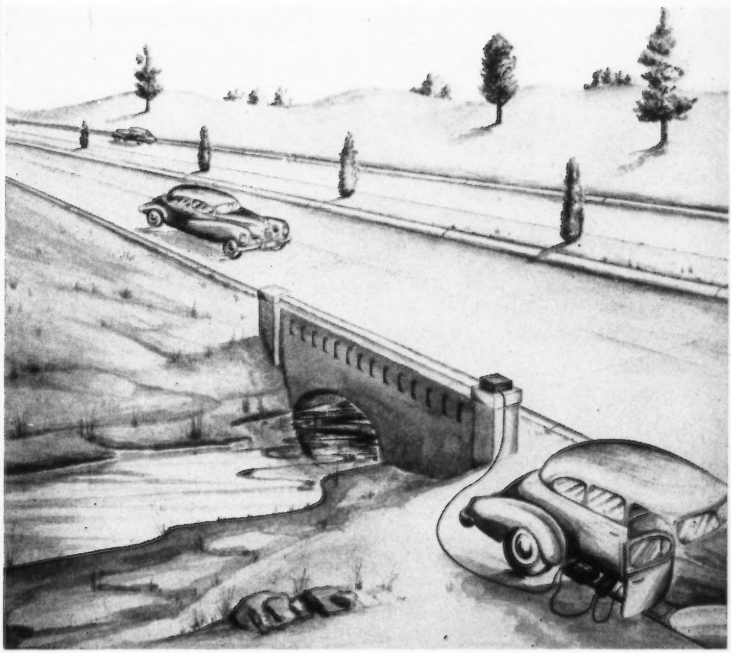

- Model S-1 Speed Meter is a precision instrument for measuring speeds of vehicles on streets or highways. No tubing, detectors, or wires required on road.
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Above: Swift Boulevard looking south in Vanport City, Ore. Lanes from extreme left to right (1) lead from Vancouver bridge into Swift; (2) from Union and Denver Avenues into Swift; (3) connect with overpass shown here, leading to Vancouver bridge; (4) to Union and Denver routes into Portland.

Below: Union Avenue looking north in Vanport City, Ore. Access route to Swift Boulevard at extreme right. To Vancouver bridge, straight ahead. Lanes at left, separated by divider strip, lead from Vancouver and Swift Boulevard to Portland.

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Urge Independent Traffic Agency

Warning that continued New York City inaction on the parking problem would blight commercial areas and undermine the municipal tax structure, the Real Estate Board of New York has called for a powerful independent traffic agency, according to the *New York Times*.

"Its need is immediate and urgent," Leonard S. Gans, chairman of the board's Committee on Parking and Traffic, declared. "There is no question that the throttling effects of traffic congestion will, unless corrected, drive out business."

Steps should be taken at once to create a traffic board under the permissive law enacted at the last session of the Legislature, Mr. Gans asserted. The bill, sponsored by State Senator Seymour Halpern of Queens, sets up the framework.

The Halpern bill limits the proposed traffic agency to a salaried traffic engineer as chairman, with four to eight city officials as members. The realty group suggested that by adding a "very few" qualified industrial and commercial leaders, it would become a truly representative commission for dealing intelligently with all phases of the pressing problem of traffic congestion.

"Meanwhile we should endeavor to accomplish something with what we have." Mr. Gans said. "Even the efforts of the Mayor's own Special Traffic Committee have been hamstrung by lack of funds. We can't make bricks without straw. Let us have immediate creation of a traffic board, properly financed and equipped."

The recommendations gathering dust in municipal files include a proposal by the special traffic body for permanent status. It was held significant that since the group, headed by Police Commissioner Arthur W. Wallander, quietly asked Mr. O'Dwyer in April for a small appropriation to function as an independent executive agency, its work virtually has ceased.

The second suggestion for curing parking ills was the report prepared at the Mayor's direction by Edward C. Maguire, Commissioner of Commerce. It included immediate and long-range proposals for freeing clogged city streets and noted "that if we are truly seeking relief, then the public must become reconciled to the fact that certain obligations, financial and otherwise, must be assumed."

The report, supposed to have the blessing of the Mayor, was delivered to Mr. O'Dwyer on May 5. Instead of acting upon it, he referred it to his Committee on Administration. In June a single hearing was held at which three members of Mr. Maguire's Business Executive Advisory Committee pleaded for favorable action. "As near as I can learn, it's still at a complete standstill," Mr. Maguire said.

Principal stumbling block to adoption of the Halpern bill or the Maguire recommendations is the proviso for hiring a qualified traffic engineer,

Automobile drivers who do not step on the brakes fast enough in emergencies may owe their slow reaction time to poor diet. Short rations of the B vitamin called thiamin slowed the reaction time of a group of women at the State University of Iowa, Drs. W. W. Tuttle, Marjorie Wilson and Kate Daum of that institution reported. The tests were made on reaction time to a light stimulus, but presumably the findings apply generally and to men as well as women.

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it was reported. While the Halpern law makes this a mandatory part of any traffic agency, the Maguire report holds that such a man is needed, if at all, solely in an advisory capacity.

However, the Mayor, "a cop at heart," is said to have been swayed by friends in the Police Department who see a traffic engineer as encroaching on police jurisdiction.

A few months ago Robert Moses, City Construction Coordinator, brought one of the country's leading traffic engineers to meet Mr. O'Dwyer and Mr. Wallander. It appeared that the ideal consultant had been found until city police traffic experts joined the conferences. The next day the negotiations were dropped.

Complete First Part Colorado Survey

Publication of Part I of the "Report of a Study of the Highway Laws, Organization and Procedures of Colorado" by the Highway Research Board opens up a vitally important but unexplored field of highway interest—the evaluation of the structure and practices of state highway agencies in terms of present-day needs.

The Colorado study was undertaken by the Board's Committee on Highway Organization and Administration, at the request of Governor William L. Knous. The initial report analyzes the existing departmental set-up and methods and, where necessary, recommends improvements that can be made by administrative or executive action.

Part II will be embodied in a subsequent report which will deal with corrective measures requiring legislative changes. Work is going forward on this phase of the study.

Department Being Reorganized

The report has been approved by the Governor, the Colorado Highway Advisory Board and the State Highway Department. At a meeting following his release of the document to the public, Governor Knous urged the Advisory Board and Department to give immediate attention to the Committee's recommendations, indicating that he would use his executive powers to implement them as rapidly as possible. Preparatory steps for the reorganization of the agency have already been taken.

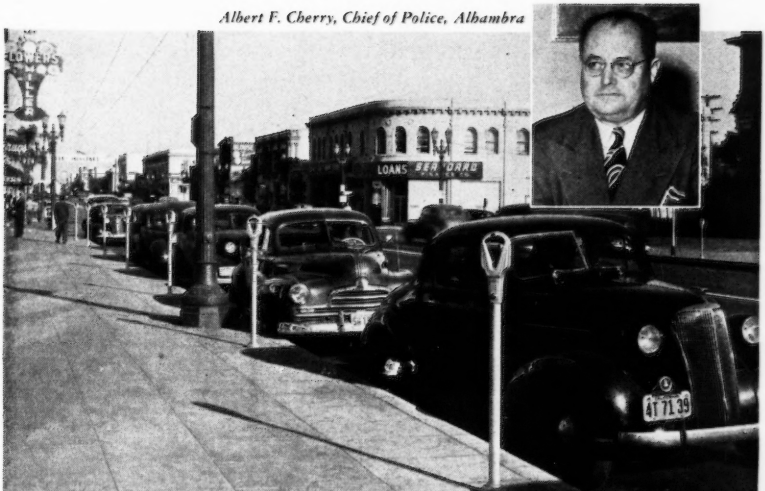
Membership of the Committee which prepared the report includes Samuel C. Hadden, Consulting Highway Engineer, Chicago-Detroit Expressway, Chairman; D. C. Greer, State Highway Engineer, Texas Highway Department; W. L. Haas, Chief, Administrative Research Section, Public Roads Administration; Hal H. Hale, Executive Secretary, American Association of State Highway Officials; G. Donald Kennedy, Vice President, Automotive Safety Foundation; Earl D. Mallery, Executive Director, American Municipal Association; C. M. Nelson, Editor, "Better Roads Magazine;" Ben H. Petty, Professor of Highway Engineering, Purdue University; and L. S. Tuttle, Assistant to the Commissioner, Public Roads Administration.

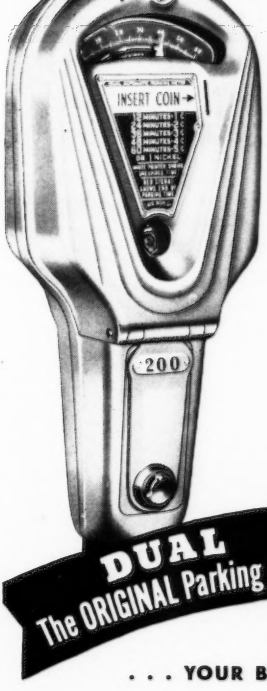
"Big Business"

Keynote of the study is that state highway administration today is "big business," and should therefore be organized and conducted in accordance with the best practices of modern business management. The widespread interest which the report has elicited indicates that it will have far-reaching effect. Copies were sent by the Highway Research Board to

"Traffic Engineering Functions and Administration" can be obtained from Public Administration Service, 1313 East 16th Street, Chicago 37, Illinois at $2.50 a copy.

Albert F. Cherry, Chief of Police, Alhambra





More votes for DUAL'S plus values!

in ALHAMBRA, CALIFORNIA

HERE'S another progressive city that chose DUALS for their extra advantages. Alhambra, Calif., recently installed 745 Dual Automatic Parking Meters.

And Alhambra's Chief of Police Albert F. Cherry agrees with civic officials in other "Dual cities"—in the U. S. and Canada—that these pace-setting meters do an efficient, economical job of parking control.

Duals are preferred because they're engineered like fine time-pieces . . . are accurate and precision-built. They're weather-proof and tamper-proof, rugged and long-lasting. They're attractively streamlined. Maintenance costs are remarkably low . . . service records show long, trouble-free operation. And Specialized Service *after* installation is an *extra* value for every city that installs Duals.

Before you install any meter, find out about Dual's many advantages. Write for bulletin or ask for helpful, expert survey service.

DUAL
The ORIGINAL Parking Meter

The Dual Parking Meter Co.

A Subsidiary of The Union Metal Manufacturing Company

Milford Building • Canton 2, Ohio

. . . YOUR BEST ANSWER TO EVERY PARKING PROBLEM

every state highway department in the country.

The Committee makes it clear that weakness and deficiencies noted in Colorado are probably prevalent in many other highway administrations, because "Problems of the organization and management of highway affairs have not been subjected to the same scientific scrutiny as have many of the technical highway operations." As a result, the road agencies are attempting to handle greatly increased activities and responsibilities with obsolete laws and administrative procedures which are poorly adapted to changing conditions.

Highlights of the Committee's recommendations:

1. An organizational structure which provides (a) a full time administrative and policy head; (b) an executive officer; (c) distinct lines of authority; (d) definite arrangements for liaison between staff units; (e) division into staff units; (f) geographical division into district operating units; (g) an efficient personnel unit; (h) a unit or units for development of planning and research.

Comprehensive Program Needed

2. A comprehensive plan for the orderly development of the roads and streets to serve the best interests of all the people of the state. Such a plan, which should encompass not only the physical and operational features of the road and street systems, but also taxation and other methods of financing, requires a survey and compilation of pertinent facts by experts in that field. This should be followed by study and recommendations by a representative group of citizens assisted by specialists in highway planning.

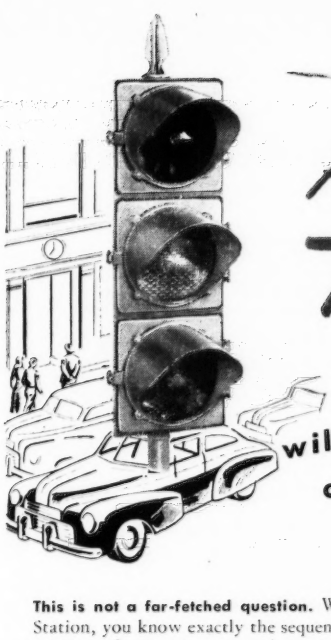
3. Reclassification of the roads and streets into the several systems required by federal and state law and good management procedures, to the end that management responsibilities, sources of funds and allocation of funds may be sharply defined. In a reclassification of roads and jurisdictional responsibilities the overall interest of the state as a whole should be a dominating factor.

4. An accounting system of modern design adapted to the needs of the department and based on the knowledge and experience of outstanding men in the field. While a good general accounting system will furnish fiscal control; cost accounting must be utilized to give administrative control. By assembling information regarding specific application of expenditures to particular jobs and activities, cost accounting provides a valuable means of measuring effort, production and efficiency.

Eagle Adds Traffic Engineer

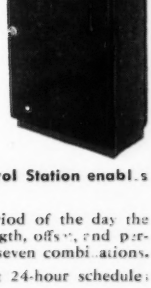
The James H. Drew Corp. of Indianapolis, Indiana, agents for Eagle Signal Corporation of Moline, manufacturers of traffic signals and controllers, have included a traffic engineering service in their organization with the addition of William H. Bilby to their staff.

Mr. Bilby is a graduate of Purdue University, class of '32, degree of B.S.C.E. He is registered as a professional engineer in Indiana and is a member of the Indiana Traffic Engineers Association, the International Municipal Signal Association and the Society of Professional Engineers. His most recent activity was with the State Highway Commission of Indiana where he served as Traffic Signal Engineer.

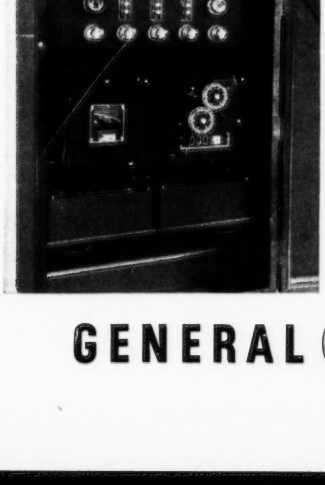


At 7 P.M. on Tuesday—

will your traffic signals correspond to traffic conditions?



This is not a far-fetched question. With the G-E Master Control Station, you know exactly the sequence, the time interval, and the relation of cross-street to main-street green at 7 p.m. on Tuesday or any other hour on any other day. For you have set up for the entire week—a schedule which guarantees that your traffic signals will correspond to traffic conditions.



Here is what the Master Control Station enables you to do:

- **Select for each 20 minute period of the day the proper combination of cycle length, offset, and percentage split from any of twenty-seven combinations.**
- **Schedule in advance 7 different 24-hour schedules to meet different conditions.**

A G-E Master Control Station is a self-contained package suitable for curb-mounting, applicable for any G-E Multiple-Dial System. It automatically puts into operation any pre-selection of 3 cycle lengths, 3 timing dials, and 3 different offsets. In addition, manual selection of any of these features can be made at any time—with cycle length varied manually between 30 and 120 seconds.

Several cities, including Los Angeles, San Francisco, Cleveland, and Chicago, are already enjoying the flexibility of G-E Master Control Equipment. For details, write *Apparatus Department, General Electric Company, Schenectady 5, N. Y.*

GENERAL ELECTRIC

Activities . . . .

A year ago the New Jersey State Highway Department disclosed that four-inch lower case letters were as legible as the standard six-inch capital letters on destination signs. Being consistent with the progress in traffic engineering, TRAFFIC ENGINEERING magazine has adopted capital and lower case letters for its headlines. In accepting this "new look" it was found necessary to change the front cover. Our new design greets our readers this month.

All persons interested in traffic are invited to attend the technical meetings of the Institute of Traffic Engineers' annual meeting in Philadelphia.

Yearbook Changes

MURRAY ZIDES
Community Planning Branch
Department of Municipal Affairs
Regina, Sask.

RICHARD W. SIVER
60 Virginia Avenue, Manasquan, N. J.

JOHN E. UPHAM
Sales Manager
Al Evans Winch Company
Gloucester, Virginia

ERNEST P. GOODRICH
Consulting Engineer
115 Broadway, New York 6, New York

HAROLD A. BREEDING
Lighting Engineering Division
General Electric Company
920 Western Avenue, West Lynn, Mass.

DAVID E. MORRIS
City Engineer
Tacoma, Washington

LT. COL. S. M. LUTZ, JR.
Air University Command
Maxwell Air Force Base
Montgomery, Alabama

Secretary's Column

Although your Executive Secretary has devoted considerable space to Traffic Engineering Conferences in past columns, the success of the recent series west of the Mississippi warrants further comment on this effective program of the Institute toward the improvement of the Traffic Engineering profession and the broadening of our friends and acquaintances in related fields.

The conferences just completed in Missouri, Texas, California, and Oregon, far exceeded all expectations in attendance. We had approximately 125 or more registrants at each of the conferences. This registration included a very broad representation of State Highway Officials, District Engineers, County Engineers, Municipal Engineers, and Transit and Police Officials. In each case, the local sponsors performed an excellent job of coordinating the conference and conducting the detailed features of the program, and publicity pertinent thereto. The success of the conferences was borne out by the fact that in each case there was a general demand for continuation on an annual basis. A special resolution was passed to this effect at the Oregon Conference and is publicized elsewhere in this issue.

In addition to over 500 registrants at the four conferences, your Executive Secretary personally contacted 100 Institute members. With but few exceptions, all members west of the Mississippi attended at least one of the

Although no word had been received when *Traffic Engineering* went to press, it is assumed that the F and F Club will meet in reunion at Philadelphia.

four conferences. The Western Section, ITE, was represented almost 100% in its two sectional meetings in California and Oregon, both of which were presided over by President Carter. This section plans to continue their active campaign toward an increase in membership and support of future conferences in the western states. Other local sections have a real challenge to maintain the pace with this widely scattered, but well-knit, organization in the western states.

Your Executive Secretary can truthfully state that the six-weeks' field trip to the western states was well worth the time and effort. It is my personal opinion that the conferences have resulted in a marked improvement in relationships between Traffic Engineers and Highway Officials, and considerable advancement for the Traffic Engineering profession generally. Plans are now under way for a series of conferences in states east of the Mississippi next year. From advance indications, it appears likely that the Institute will be asked to sponsor at least twelve or fifteen such conferences next year. This is certainly an indication that we are well along the road to increased national recognition and are firmly established as a professional engineering organization that is ready and willing to cooperate with universities, State Highway organizations, and others, in improving Traffic Engineering techniques on a nation-wide basis.

—*Robert S. Holmes*

I T E Personals

Systematic instruction in safe driving for young people is necessary to future control of traffic accidents, Delaware state officials were told recently by **JULIEN H. HARVEY.**

HOUSTON WYNN, in Honolulu, has outlined quite a comprehensive program which they are undertaking. The Honolulu Metropolitan Area Survey is getting into its final stages. Its recommendations will include an analysis of parking habits in the central district and proposed cross-town arterials as several of the many phases of the report.

BERNIE HARTUNG has advised that the City of Reno expects to install about 890 downtown parking meters. The revenue will be allocated for traffic improvements.

WIN CARSTEN was married in Lewiston, Idaho, on July 10th.

THEODORE T. McCROSKY and **FRANCIS D. McHUGH** have announced the establishment of a consulting service to private and public agencies for community and regional development problems. Their service includes consultation on community, city and regional surveys, plans and programs; industrial locations and shopping centers; zoning and subsivision regulations; traffic and parking problems; capital budgets and improvement programs; planning administration; organization of civic development and action committees; programs and plans for effective occupancy of land in urban development and redevelopment; investigations and reports. Offices are located at 23 East 26th Street, New York 10, New York.

BOB SWAIN, formerly with the Department of State, is now Assistant Executive Director of the International Road Federation with headquarters at 401 Shoreham Bldg., Washington, D. C.

Section News

WESTERN SECTION

The First California Traffic Engineering Conference is now a matter of history, but important history it is. The Conference was acclaimed as a success, and all delegates attending felt that the three days had been well spent. A final tally of the registrants indicated a registration of 150. Wire recordings were made of the proceedings of the Conference and an attempt is being made to secure copies of the papers presented, so that the complete proceedings can be prepared and made available to the delegates who attended the Conference and to members of the Western Section of the Institute. Many fine papers were presented and informative discussions were stimulated at each of the panel discussions. A vote of thanks is due Wilbur Smith and Bob Holmes and all of the other participants in the Conference for their excellent contributions. Unanimous opinion indicated a desire to hold a similar conference annually.

A number of the engineers attending the recent California Conference, who are not yet members of the Institute, indicated interest in Traffic Engineering and in the Institute's activities.

An area meeting of the Western Section of the Institute was held at the Rodger Young Auditorium, Los Angeles, on July 15, 1948. Nick Carter, President, presided. Twenty-one

members and twenty-one guests were present at the meeting.

Ralph Dorsey reported on his trip to the Board of Directors' meeting and the discussion relative to the Western Section listing recommended and approved consulting Traffic Engineers. It was the expression of those members present that specific recommendations would not be made, but that a list of all consulting Traffic Engineers in the area could be made available in response to a request for that information.

Bob Holmes reported on the recent Board of Directors' meeting and indicated that the Annual Meeting of the Institute will be well worth attending. He extended a plea for western representation on the program at the Annual Meeting and contributions of material from this area to be used in Traffic Engineering magazine. He also mentioned the listing of the Institute of Traffic Engineers in the Engineering Society Yearbook, a publication of the American Society of Mechanical Engineers prepared under the guidance of the Engineers' Joint Council, and called attention to the fact that student chapters of the Institute were being organized at some of the universities. The listing of the Institute places it on an equal footing with the other founder engineering societies.

Western ITE was praised as a medium of exchanging information and keeping alive the activities of the Section. A discussion was held resulting in the recommendation of August 26th and 27th as tentative dates for the Annual Meeting of the Western Section. It was further recommended that no technical papers be presented at the Annual Meeting.

The Western Section of the Institute takes pleasure in extending a hearty welcome to the following who have become members since the first of the year: Hutchinson, A. L., State Division of Highways, Los Angeles; Lynch, Col. F. C. (Affiliate), Greater Los Angeles Safety Council, Los Angeles; Manning, Donald G., Oregon State Highway Dept., Box 30, Salem, Ore.; McDonald, Guy D., County of Los Angeles Road Dept., Los Angeles; McLendon, Jay A., St. Traffic Control Analyst, L. A.—Mail: 2935 Orange, LaCrescenta, Calif.; Morris, David E., Traffic Engineer, Wash. State Dept. of Highways, Transportation Bldg., Olympia, Washington.

To Hold Businessmen's Conference

The Chamber of Commerce of the United States under the direction of its Construction and Civic Development and Transportation and Communication Departments has announced a Businessmen's Conference on Urban Problems for September 13 and 14, 1948, at Detroit, Michigan. ITE members listed on the program include T. M. Matson, Nathan Cherniack, Grant Mickle, Al Malo and Harold Hammond.

POSITION AVAILABLE

Position as Traffic Engineer available with the City of Springfield, Massachusetts. Salary scale from $4,500 to $5,000. Contact City of Springfield.

Conference Support Urged In Oregon

The first Oregon Traffic Engineering Conference passed the following resolution:

WHEREAS, since 1929 relatively few colleges and universities have supported in-service training conferences in the field of Transportation and Traffic Engineering; and

WHEREAS, all forms of transportation have suffered from the lack of trained manpower; and

WHEREAS, the First Oregon Traffic Engineering Conference for the Northwest Region, held in Corvallis, Oregon, July 29-31, 1948, gave consideration to this problem;

NOW, THEREFORE, be it resolved that all major colleges and universities in the Northwest Region be urged to support conferences of a similar nature as a continuing annual affair looking to betterment of traffic conditions and providing a higher level of service to the motoring public by imparting additional technical information to personnel concerned with the traffic problem; and

FURTHERMORE, that these institutions of higher learning be informed of the action taken by this conference.

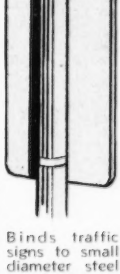
Buck-up will be played in Philadelphia with the Michigan boys acting as hosts!

Binds street name plates to steel and concrete standards

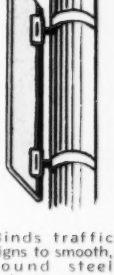
S-T-R-E-T-C-H THAT BUDGET! Erect Street, Highway and Traffic Signs . . . the *STEELBINDER* Way

COST drops, signs look trim and stay put when erected with a Steelbinder Tool and stout, corrosion resistant strap. Maintenance men like the easy way Steelbinders strap on the sign, even in cold weather, and the work saved when the sign is removed. Cement or steel standard, round, square, or irregular shape, plain or fluted surface, the Steelbinder method provides a permanent, trim looking sign mounting, saves work and material, and eases the strain on your budget dollar.

HOLDS FAST ON ANY SURFACE

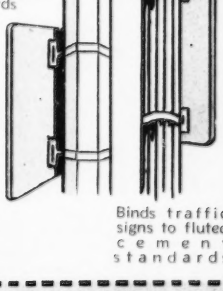


Binds traffic signs to small diameter steel standards

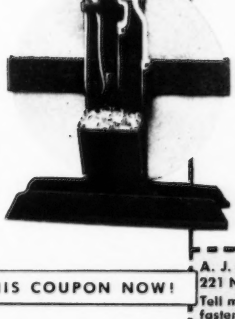


Binds traffic signs to smooth, round steel poles

Binds traffic signs to octagonal cement standards



Binds traffic signs to fluted cement standards



COMPLETE PORTABLE STRAPPING OUTFIT

Light enough to carry. Includes Steelbinder Strapping Tool, Strapping, Hammer Cutter, and supply of seals.

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A. J. Gerrard & Co.

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MAIL THIS COUPON NOW!

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Tell me more about the Steelbinder way to fasten traffic signs and street name plates on poles.

Name .....

Address .....

City ..... State .....

New Members Elected to Institute

The following were elected members of ITE at the Board of Direction meeting on June 28th:

MEMBERS:

MR. HARRY F. AUMACK
Registered Professional Engineer
3 West 28th Avenue
Spokane 9, Washington

MR. BOB GLENN
Resident Engineer
Legislative Interim Comm. for Study of Hwy., Road & Street Needs, Revenue & Taxation
Room 311, Capitol Bldg., Salem, Oregon

MR. MAURICE W. HEWETT
Traffic Engineer City of St. Paul
234 City Hall, St. Paul, Minnesota

AFFILIATE:

COL. F. C. LYNCH,
Mgr., Los Angeles Chapter, N.S.C.
326 Oaklawn Ave., So. Pasadena, Calif.

ASSOCIATES:

ADOLPH BAHN, JR.
Project Manager
Parsons, Brinckerhoff, Hogan & MacDonald
142 Maiden Lane,
New York City 7, N. Y.

T. RALPH GOODMAN
Assoc. Civil Engineer
City of Glendale, Public Works Dept.
120 N. Howard St., Glendale 6, Calif.

WILLIAM D. HEATH,
Planning Engineer
Dept. of Veh. & Traffic, Washington, D. C.
SEND MAIL: 301 Whittier St., N.W.
Washington, D. C.

MR. ALEXANDER L. HUTCHISON
Asst. Distr, Traffic Engineer
State of California, Los Angeles, Calif.
SEND MAIL: 12250 LaMaida St.
North Hollywood, Calif.

MR. VALDEMAR P. JOHNSON
Traffic Engr. Div.
Oregon State Hwy. Dept., Salem, Oregon

MR. SAMUEL J. LEVINE,
Highway Traffic Engineer
Michigan State Hwy. Dept.
Lansing 13, Michigan
SEND MAIL: 17405 Lahser Road
Detroit 19, Michigan

MR. GUY D. McDONALD
Traffic Engineer
County of Los Angeles, Road Dept.
108 West Second St.
Los Angeles 12, Calif.

MR. ROBERT L. McVOY
Assistant Civ. Engineer.
Dept. of Public Works, State of N. Y.
Utica, New York

MR. LEO G. WILKIE
Traffic Engineer
Ill. Div. of Hwys.
160 N. LaSalle St., Chicago, Ill.
SEND MAIL: 6441 N. Hoyne Ave.,
Chicago 45, Ill.

JUNIORS:

MR. EARL H. FLYNN,
Jr. Hwy. Engr., Conn. State Hwy. Dept.
SEND MAIL: 90 Sisson Ave.
Hartford 6, Connecticut

MR. LAWRENCE LAWTON
Bur. of Art. Rte. Plann.
N. Y. S. Dept. of Pub. Wks.
353 Broadway, Albany 1, N. Y.

The following transfers were approved at the June 28th Board of Direction meeting:

TRANSFERRED FROM JUNIOR TO FULL MEMBER:
Mason A. Butcher

TRANSFERRED FROM ASSOCIATE TO FULL MEMBER
Ralph B. Luckenbach
James E. Reading
A. Glen Smoot

TRANSFERRED FROM JUNIOR TO FULL MEMBER
Frederick C. Tarbox

TRANSFERRED FROM ASSOCIATE TO FULL MEMBER
George M. Webb

TRANSFERRED FROM JUNIOR TO ASSOCIATE MEMBER:
Richard Wilcox

PARKING, *(Con't. from 557)*

Newton, Massachusetts (Pop. 70,000)

A five-man committee of Aldermen was selected to administer the city's municipal parking plan. Studies have been made by the committee and at least one recommendation was acted upon by the city. Appropriation was made for the acquisition of one parking site to accommodate 250 cars.

Pittsburgh, Penn. (Pop. 672,000)

One of the most comprehensive parking surveys ever made furnished the factual basis for Pittsburgh's Parking Authority authorized by the 1947 Pennsylvania General Assembly. Plans call for the provision of a total of over 25,000 off-street parking spaces at a cost of some $36,000,000 to be financed by 30-year revenue bonds. The first stage of the authority's plans call for the completion of over 4,000 spaces at a cost of nine and one-half million dollars.

The Authority plans to provide approximately 11,000 short-time spaces within the core of the business district and about 14,000 spaces a little further out, but still usable by all-day parkers. Most garages will be the open deck type.

It is reported that a recent Supreme Court decision gives the Authority a clear go-ahead on its plans.

Port Huron, Michigan (Pop. 33,000)

This city has a large off-street parking lot

Grote REFLECTOR SIGNALS FOR SAFETY AND ECONOMY

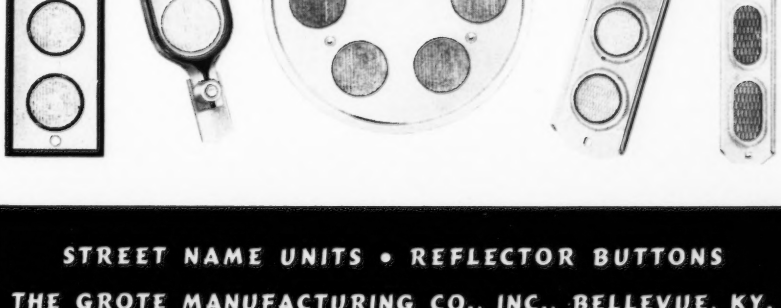
Don't be satisfied with material of low reflecting intensity that requires frequent replacement.

Safety demands reflectors of extremely high reflecting power.

Now you can standardize on Grote reflectors—for marking bridges, abutments, clearance limits, culverts, gateway entrances, road delineators or road ends.

These Grote units are equipped with Grotelite prismatic reflectors, precision molded from shatter-resisting Plexiglas. The total refraction optical principle insures brilliant reflecting efficiency at long or short instances. Grotelite reflectors do not black out in fog or rain. Housings for all units are fabricated from heavy gage rust resisting steel, finished in baked enamel.

Standardize on Grote for Safety and Economy.



STREET NAME UNITS • REFLECTOR BUTTONS

THE GROTE MANUFACTURING CO., INC., BELLEVUE, KY.

just east of the business district. The lot is being expanded through purchase by the city of three properties from which obsolete buildings are being removed.

Richmond, Virginia (Pop. 193,000)

Action taken last year resulted in the formation of a Parking Authority. The Authority has been appointed, a plan formulated and a factual survey was begun a few weeks ago under the sponsorship of the city, the state and the U. S. Public Roads Administration. Technical supervision is by an outside consulting firm.

Royal Oak, Michigan (Pop. 25,000)

A parking committee, appointed by the President of the Chamber of Commerce, is working with the City Manager and Commission in planning an off-street parking program. At present there are several free parking lots in the business district, maintained by the city. Taxes on these vacant areas are paid by the Chamber of Commerce, thus obtaining their use for parking on more or less a day to day basis. Realizing that use of these lots may be lost, the Parking Committee is attempting to secure other parcels by purchase or long term lease. It is planned to set up a Parking Authority with powers to purchase land, maintain parking lots, etc.

Washington, D. C. (Pop. 663,000)

A Motor Vehicle Parking Agency was created by an act of the 77th Congress. This act authorizes the Commissioners of the District of Columbia to acquire, operate and regulate off-street parking facilities, and creates the Parking Agency, composed of seven members, to assume the active direction of the parking program. The power to purchase and sell property is not assigned to the Agency, but remains with the Commissioners.

Thus far authority to acquire and operate off-street parking facilities has not been utilized. Instead the Motor Vehicle Parking Agency has held to the idea that the job of providing off-street parking facilities ought to be done by private capital and that the place of the Agency is to make factual studies and to provide information to private builders on such matters as best parking garage or lot locations, building regulations, etc.

White Plains, N. Y. (Pop. 40,000)

Under authority of state enabling legislation, White Plains has a Parking Authority which can purchase and condemn property, issue bonds and utilize city personnel or equipment by paying a proper share of costs.

The Authority's bonds are to be tax free and not more than $1,000,000 worth can be outstanding at any one time. Proceeds from parking meter revenues are to go to the authority.

IN THE SPOTLIGHT!
TUTHILL GUARD RAILS
for safe, sure service
UPTODATE highways need modern guard rail protection. Here's why it will pay you to install the TUTHILL Guard Rail:
SAVES LIVES. The springy, convex rail keeps cars from going off the road. At night, too, it shows up clearly under headlights, plainly marking the course of the road.
SAVES DOLLARS. The one-piece, weatherproof Tuthill Guard Rail is simplicity itself. Easy and quick to erect. Never can sag. Requires little or no maintenance.
Be wise. Select the Tuthill Guard Rail for your highway installations.
TUTHILL SPRING CO.
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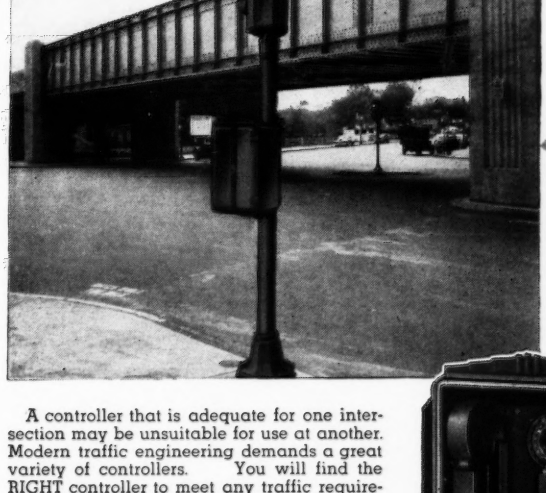
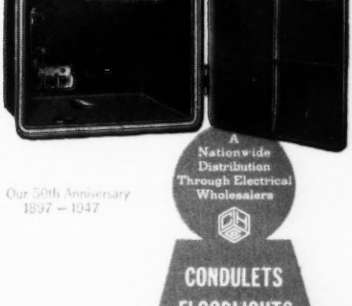
SAFE traffic control

requires the RIGHT controller for every intersection



Installation of Crouse-Hinds Type GS Controller at a five-way intersection

Crouse-Hinds Type GS-4 Controllers with their Crouse-Hinds time-keeping synchronous motors will keep in step with each other at adjacent intersections. Their multiple-circuit cam units make them capable of efficiently controlling the flow of traffic at complicated locations.



A controller that is adequate for one intersection may be unsuitable for use at another. Modern traffic engineering demands a great variety of controllers. You will find the RIGHT controller to meet any traffic requirement in

CROUSE-HINDS
complete line

It includes every type that is necessary to handle any traffic problem .... from a simple non-interconnected installation to full progressive systems employing multi-circuit controllers.

Full details and complete listings are in Crouse-Hinds Catalog 226, along with a full line of traffic signals, beacons, and flashers. Send for your copy.

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1897 — 1947

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Personalities . . . .

James E. P. Darrell, traffic engineer of the Minnesota State Highway Department, makes his work his hobby.

Jim, who supervises traffic engineering, highway safety promotion, accident reports and drivers license functions of the state highway department, is a veteran of both World Wars, and saw overseas service in both. He served from May 2, 1917 to April 29, 1919 in the first World War, six months of it in Europe, and re-entered military service in May, 1943, as a captain in the Transportation Corps, advancing to major before being released from active duty in April of 1946. He was first assigned in the 6th Traffic Zone in Chicago and Detroit, then in March of 1945 began a nine months tour of duty on the Stillwell Road project in the China-Burma-India theatre, where he was chief of plans for operations over the Ledo and Burma roads.

Born on St. Kitts Island in the British West Indies in 1896, Jim came to Minnesota in 1900, attended grade and high schools at Chatfield and Redwood Falls, and received his civil engineering degree from the University of Minnesota in 1923. He and Mrs. Darrell live at 1463 Hewitt Avenue, St. Paul. They have one married son.

Jim started highway and traffic work as a rodman and instrumentman during summer vacations. In 1921 he came to the newly established state highway department. He had two years as instrumentman and assist-

(See DARREL, *page 588)*

Reared on a Louisiana plantation, Paul L. Ristroph has had as varied a life as almost anyone you can name, yet his working years have all been devoted to traffic in one way or another. From the time he was graduated from Louisiana State University in 1930 with a Bachelor of Electrical Engineering Degree and an Army Reserve Officer's Commission his experience in traffic engineering started. His introduction to traffic work began with New Orleans Public Service in the Railway Department in January of 1931. In 1933, as a Reserve Officer, he went on active military duty with the Civilian Conservation Corps where he served in various capacities, including Camp Commander of three camps. In 1936, he asked to be relieved of his command to return to civilian work and became Traffic Engineer for the City of New Orleans. In 1937, he took leave to study Traffic Engineering at Harvard University, after which he returned to his original capacity in New Orleans until January, 1939.

It was then that Paul went to Washington, D. C., as Traffic Analyst for the Works Progress Administration in the National Headquarters. He was responsible for professional review of all proposed traffic and mass transportation projects in the U. S. In October of the same year he again returned to New Orleans, and rejoined the Railway Department of New Orleans Public Service which

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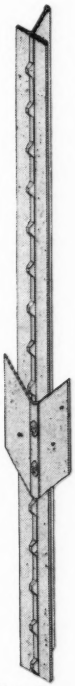

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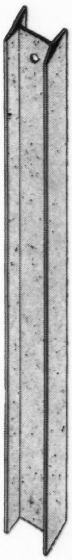

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A year later, in 1940, the darkening clouds of World War II caused him again to renew his active service with the Army. His initial duty was with the Staff and Faculty of The Engineer School at Fort Belvoir, Va., where his proficiency in traffic engineering served him well in preparing vehicular traffic and transportation manuals. As a next logical step, he was assigned to the Army Engineer Board for the purpose of developing traffic control equipment and techniques and for developing black-out equipment and procedures. He was then placed in charge of the preparation of a Staff Officer's Field Manual on Traffic Circulation and Control, which was a completely new manual establishing traffic doctrine for divisions and larger units. It was used by the Army throughout the world during hostilities.

About this time, transportation problems relating to Army Headquarters and especially those relating to The Pentagon became pressing and Paul was called to Washington where he served as Transportation Officer on the General Staff of Headquarters, Military District of Washington in the Office of the Army Headquarters Commandant. He saw final service as Executive Officer of that Office. In acknowledgment of his military service, Lieutenant Colonel Ristroph was awarded the American Defense Medal, the Victory Medal and the Army Commendation Ribbon with Oak Leaf Cluster. He completed his active duty with the Army in August, 1946.

In May, 1946, while on terminal leave from the Army, he rejoined New Orleans Public Service as Traffic Engineer, but almost immediately he was granted a leave of absence to organize a Division of Traffic Engineering for the City of New Orleans. Within a year the department was organized, traffic improvements inaugurated, and a program developed for future progress. He relinquished his post with the city in 1947 to return to his traffic engineering duties with the New Orleans Public Service, but has continued his interest in city traffic engineering from his position as a member of the Advisory Traffic Safety Committee to assist the City Traffic Engineer.

Married and the father of three boys, Paul is fond of fishing, hunting and traveling.

DARRELL, *(Cont. from page 586)*

ant engineer with the Northern States Power Company before joining the Plans Division of the State Highway Department.

Within the department Jim has had experience as concrete pavement inspector, assistant engineer in the lands and rights of way and road maintenance divisions and in 1937 became senior engineer in the new Traffic and Safety Division, advancing to assistant traffic engineer in 1941.

Jim was designated from the department for the special course in traffic studies offered by Yale University in 1940-41, and from January to April of 1942 was on special assignment with the Federal Bureau of Investigation as instructor in a series of F.B.I. schools held in various parts of the country in connection with the Civilian Defense program.

He is a member of the *Institute of Traffic Engineers*, Traffic Research Associates, the Minnesota Association of Professional Engineers, the St. Paul Engineers Society, the Society of American Military Engineers, the Minnesota Surveyors and Engineers Society and the Traffic and Transportation Committee of the Highway Research Board of the National Research Council.

Jim is also a fisherman and is a member of a male quartet.

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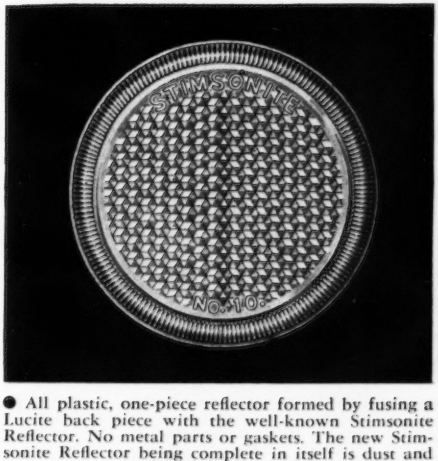

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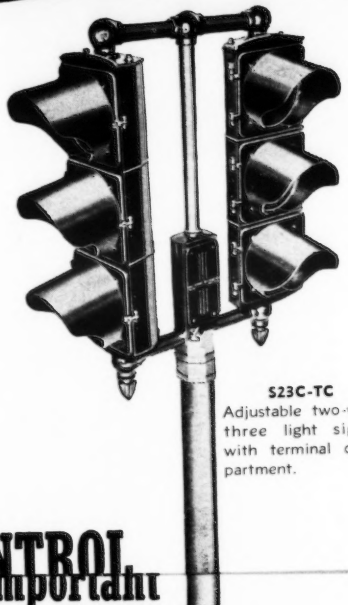

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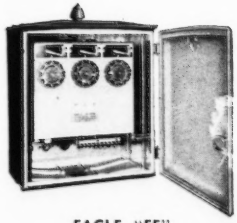

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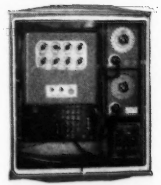

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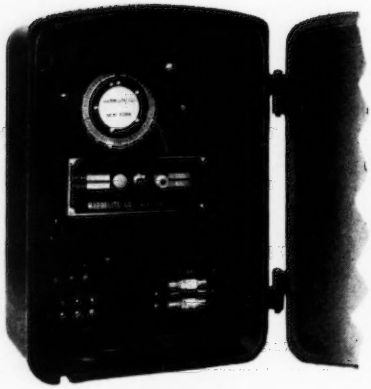
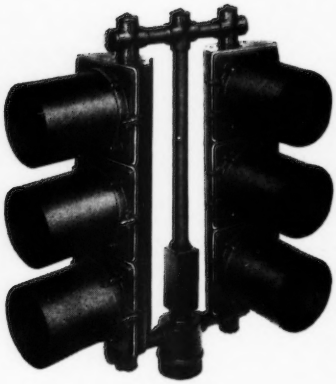


MY-6



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